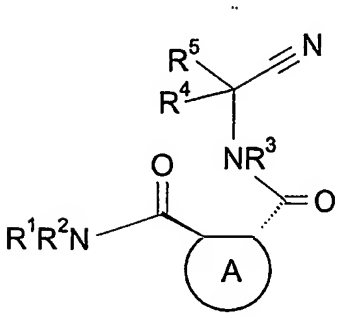
## CLAIMS

1. Use of a compound of formula (I):



(I)

in which:

A is a 6-membered ring optionally containing a double bond and optionally containing an oxygen atom or NR group in the ring;

R is hydrogen or $C_{1-6}$ alkyl;

$R^1$ and $R^2$ are independently, $C_{1-6}$ alkyl or $C_{3-6}$ cycloalkyl both of which can optionally contain one or more O, S or $NR^3$ groups, or $R^1$ and $R^2$ together with the nitrogen atom to which they are attached form a 3,4-dihydroisoquinoline ring or a 5- or 6-membered saturated ring optionally containing a further O, S or N atom and optionally substituted by a group $-(CH_2)_p-R^6$ where p is 0 to 3 and $R^6$ is $C_{1-6}$ alkyl, $CONR^7R^8$ where $R^7$ and $R^8$ are independently hydrogen, $C_{1-6}$ alkyl which can optionally contain one or more O, S or $NR^3$ groups, or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or $NR^3$ group;
or $R^6$ is a 4 to 7-membered saturated ring optionally containing one or more O, S or N atoms, or an aryl or heteroaryl group containing one to four heteroatoms selected from O, S or N, the saturated ring, aryl and heteroaryl groups all being optionally substituted by halogen, amino, hydroxy, cyano, nitro, carboxy, $CONR^7R^8$, $SO_2NR^7R^8$, $SO_2R^3$, trifluoromethyl, $NHSO_2R^3$, $NHCOR^3$, $C_{1-6}$ alkyl, $C_{1-6}$ alkoxy, $SR^3$ or $NR^9R^{10}$ where $R^9$ and $R^{10}$ are independently hydrogen, $C_{1-6}$ alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or $NR^3$ group;

$R^3$ is hydrogen or $C_{1-6}$ alkyl;

$R^4$ is hydrogen or $C_{1-6}$ alkyl;

$R^5$ is hydrogen, $C_{1-6}$ alkyl or $C_{3-6}$ cycloalkyl both of which can optionally contain one or more O, S or $NR^3$ groups or $R^5$ is aryl or a 5- or 6-membered heteroaryl group containing one or two heteroatoms selected from O, S or N, the aryl and heteroaryl groups all being optionally substituted by halogen, amino, hydroxy, cyano, nitro, carboxy, $CONR^7R^8$, $SO_2NR^7R^8$, $SO_2R^3$, trifluoromethyl, $NHSO_2R^3$, $NHCOR^3$, $C_{1-6}$ alkyl, $C_{1-6}$ alkoxy, $SR^3$ or $NR^9R^{10}$ where $R^9$ and $R^{10}$ are independently hydrogen, $C_{1-6}$ alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or $NR^3$ group;

or $R^4$ and $R^5$ together form a 5- or 6-membered saturated ring optionally containing a further O, S or $NR^3$ group and optionally substituted by , $C_{1-6}$ alkyl;

and pharmaceutically acceptable salts or solvates thereof, in the manufacture of a medicament for use in the inhibition of Cathepsin S in a warm blooded animal, such as man.

2. Use according to claim 1 in which A is a cyclohexane ring.

3. Use according to claim 1 or 2 in which $R^1$ and $R^2$ together with the nitrogen atom to which they are attached form an unsubstituted morpholine ring or a piperidine ring substituted by a group $-(CH_2)_p-R^6$ where p and $R^6$ are as defined in claim 1

4. Use according to any one of claims 1 to 3 in which $R^3$ is hydrogen.

5. Use according to any one of claims 1 to 4 in which $R^4$ is hydrogen.

6. Use according to any one of claims 1 to 5 in which $R^5$ is hydrogen or phenyl optionally substituted by $C_{1-6}$ alkyl or $C_{1-6}$ alkoxy.

7. Use according to any one of claims 1 to 6 where the compound of formula (I) is selected from:

(1R,2R)-N-[Cyano(2-methoxyphenyl)methyl]-2-(morpholin-4-ylcarbonyl)cyclohexanecarboxamide,
(1R,2R)-N-[Cyano(2-methoxyphenyl)methyl]-2-{[4-(4-fluorobenzyl)piperazin-1-yl]carbonyl}cyclohexane carboxamide,
(1R,2R)-N-[Cyano(2-methoxyphenyl)methyl]-2-(3,4-dihydroisoquinolin-2(1H)-ylcarbonyl)cyclohexane carboxamide,
(±) Trans-N-(cyanomethyl)-2-{[4-(4-fluorobenzyl)piperazin-1-yl]carbonyl}cyclohexanecarboxamide,
(±) Trans-N-[cyano(2-methoxyphenyl)methyl]-2-[(4-methylpiperazin-1-yl)carbonyl]cyclohexanecarboxamide,
(1R,2R)-N-[Cyano(2-methoxyphenyl)methyl]-2-{[4-(4-fluorophenyl)piperazin-1-yl]carbonyl}cyclohexane carboxamide,
(1R,2R)-N-(4-Cyano-1-methylpiperidin-4-yl)-2-{[4-(4-fluorophenyl)piperazin-1-yl]carbonyl}cyclohexane carboxamide,
and pharmaceutically acceptable salts thereof.

8. A compound of formula (I) as defined in any one of claims 1 to 7 for use in therapy.

9. A pharmaceutical composition which comprises a compound of the formula (I) as defined in any one of claims 1 to 7 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable diluent or carrier.

10. A method for producing inhibition of a cysteine protease in a mammal, such as man, in need of such treatment, which comprises administering to said mammal an effective amount of a compound of the present invention as defined in any one of claims 1 to 7, or a pharmaceutically acceptable salt thereof.

11. A method for producing inhibition of a cysteine protease in a mammal, such as man, in need of such treatment, which comprises administering to said mammal an effective amount of a compound as defined in any one of claims 1 to 7, or a pharmaceutically acceptable salt thereof.

12. A method for treating pain, such as neuropathic pain, in a mammal, such as man, in need of such treatment, which comprises administering to said mammal an effective amount of a compound as defined in any one of claims 1 to 7, or a pharmaceutically acceptable salt thereof.